5

10

15

20

## ABSTRACT OF THE DISCLOSURE

The present invention relates to a support device (1) for a rotary drum (2) such as, for example, an oven, drier, cooler or other apparatus, intended, in particular, for heat and/or chemical treatments for materials, including at least one roller (3), capable of co-operating with the said drum (2), and at least two bearings (5, 5'), capable of permitting the rotation of the said roller (3) about its axis of rotation (4).

According to the invention, the said device further includes :

- a chassis (7), to which the said bearings (5, 5') are secured, mounted for pivoting about a pivotal axis (11) substantially perpendicular to the plane passing through the axis of rotation (4) of the said roller (3) and perpendicular to the block (6), on which the said device (1) is placed, termed a pivotal plane;

- connecting means (8), flexible in a given direction (9, 9'), termed the direction of flexibility, and rigid in the directions orthogonal to the said direction of flexibility (9, 9'), to maintain the said bearings (5, 5') on the said block (6) while permitting free pivotal movement of the said chassis (7), in such a way as to permit alignment of the said roller (3) on the drum (2) in the event of the latter pivoting.

Figure 2.

## ORGANISATION MONDIALE DE LA PROPRIETE INTELLECTUELLE Bureau international



## DEMANDE INTERNATIONALE PUBLIEE EN VERTU DU TRAITE DE COOPERATION EN MATIERE DE BREVETS (PCT)

(51) Classification internationale des brevets 6:

F27B 7/22, F16C 13/04

(11) Numéro de publication internationale:

WO 98/46952

(21) Numéro de la demande internationale:

A1

(43) Date de publication internationale: 22 octobre 1998 (22.10.98)

PCT/FR98/00750

(22) Date de dépôt international:

14 avril 1998 (14.04.98)

(30) Données relatives à la priorité:

97/04922

16 avril 1997 (16.04.97)

FR

(71) Déposant (pour tous les Etats désignés sauf US): FCB [FR/FR]; 38, rue de la République, F-93100 Montreuil (FR).

(71) Déposants (US seulement): METTAVANT Guillaume (héritier de l'inventeur décédé) [FR/FR]; 176/20 rue Roger Salengro, 59260 HELLEMMES-LILLE (FR). METTAVANT Stéphanie (héritière de l'inventeur décédé) [FR/FR]; 176/20 rue Roger Salengro, 59260 HELLEMMES-LILLE (FR).

(72) Inventeur: METTAVANT, Pierre (décédé).

(72) Inventeur: et

(75) Inventeur/Déposant (US seulement): CHIELENS, Alain [FR/FR]; 37, rue de la Briqueterie, F-59420 Mouvaux

(74) Mandataire: DUTHOIT, Michel; Bureau Duthoit Legros

Associés, 19, square Dutilleul, Boîte postale 105, F-59027 Lille Cedex (FR).

(81) Etats désignés: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG,

MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US UZ, VN, YU, ZW, brevet ARIPO (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), brevet eurasien (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), brevet européen (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), brevet OAPI (BF,

BJ. CF. CG. CI. CM, GA, GN, ML, MR, NE, SN, TD, TG).

Publiée

Avec rapport de recherche internationale.

(54) Title: CYLINDRICAL DRUM SUPPORT DEVICE

(54) Titre: DISPOSITIF SUPPORT POUR TAMBOUR ROTATIF

(57) Abstract

The invention concerns support device (1) for a cylindrical drum (2) such as, for instance, an oven, drier, cooler or the like, designed for thermal and/or chemical treatment of materials, comprising at least a track roller (3), co-operating with said drum (2), and at least two bearings (5, 5') for enabling said roller (3) to rotate about its rotation axis (4). The invention is characterised in that the device further comprises: a frame (7), whereto said bearings (5, 5') are secured, mounted articulated about a pivoting axis (11) substantially perpendicular to the plane passing through said roller (3) rotation axis (4) and perpendicular to the block (6) on which said device (1) is placed, called articulating plane; linking means, flexible along a predetermined direction (9, 9'), called flexibility direction, and rigid in the directions orthogonal to said flexibility direction (9, 9'), to maintain said bearings (5, 5') on said block (6) while allowing the frame (7) to move freely in articulation, such that the roller (3) is aligned with the drum (2) when the latter is pivoting.

